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NUTRITIONAL INTERVENTION IN OVERWEIGHT AND OBESE PATIENTS

Posea Mihaela, PhD
National Institute of Diabetes, Nutrition and Metabolic Diseases "N. C. Paulescu", Bucharest

Background and Aims. Obesity is a major risk factor for type 2 diabetes, cardiovascular diseases, cancer, pulmonary diseases, osteoporosis. Our study aimed to evaluate the caloric intake, vitamins and minerals from food before a nutritional intervention to overweight and obese patients.

Material and methods. We evaluated the content of food before running a nutritional intervention program of 124 overweight and obese patients . We assessed the kilocalories, vitamins and minerals from intake food using a 7-day weighed food self-records; measured resting metabolic rate after eight hours fasting with an indirect calorimeter and parameters like weight, body mass index, body fat, percent of body fat, abdominal circumference and arterial tension.

Results. Considering a normal percent of body fat (PBF) for women between 20 and 30 and for men between 15 and 20, the mean value of PBF in group B, was significant higher in women than men ($p<0.00001$). Also women have significantly more often values of abdominal circumference over normal. Overweight and obese patients had an excessive intake of sodium, iron and selenium. They had an inadequate intake of D and E vitamins (less than 90% of recommended daily intake) and A, B1, B2, B3, B5, B6, B12 and C vitamins (more than 110% of recommended daily intake). After the nutritional intervention, overweight and obese patients had significantly lower level of intake carbohydrates ($P=.018$), lipids ($P=.002$), B1 vitamin ($P<.001$), B3 vitamin ($P=.02$) and E vitamin ($P=.016$). There is a significantly increased level of proteins ($P<.001$). The intake levels of following's decreased: sodium ($P<.001$), magnesium ($P=.006$), zinc ($P=.035$), copper ($P=.002$), manganese ($P<.001$). Phosphorus is the only mineral of which the intake level increased significantly ($P<.001$). All the anthropometric parameters decreased significantly: weight ($P<.001$), body mass index ($P<.001$), body fat ($P<.001$), percent of body fat ($P<.001$), abdominal circumference ($P<0.001$), systolic arterial tension ($P<.001$), diastolic arterial tension ($P=.002$).

Conclusions. All the patients had imbalanced intake of vitamins and minerals both before and after intervention. We need to pay more attention to food quality and quantity during low caloric diet, thus to assure the recommended daily intake for vitamins and minerals.

COMPARISON OF EFFICACY AND SAFETY OF LONG-TERM WARFARIN THERAPY IN PATIENTS WITH NON-VALVULAR ATRIAL FIBRILLATION

Romaniuk S.A., Opolonskaja N.A., Kysenko E.V.
Scientific research supervisor: Pristupa L.N., professor
Sumy State University, Department of Internal Medicine postgraduate education

Introduction: Anticoagulation with vitamin K antagonist (VKA) has been an enduring gold standard for stroke prevention in atrial fibrillation (AF). But the potential for serious bleeding complications of the drug remains a problem for the safe use of drug

Aim: Examine the prevalence of thromboembolic and bleeding complications in patients with non-valvular atrial fibrillation who receiving warfarin.

Metarials and methods: A total of 40 patients with non-valvular atrial fibrillation were recruited between July 2015 and January 2016 and were provided written informed consent. They were divided on two groups: firsts group of patients who did not take warfarin and second group of patients who took warfarin. We used CHA_2DS_2VASc score to assess the risk of thromboembolic complications (TEC), scale HAS-BLED to assess the risk of bleeding, control of laboratory parameters. Patients who taking warfarin, was calculated time spent in the target range (TTR) of International Normalized Ratio (INR).Participants also completed a questionnaire about their vitamin K-rich beverage and food intake.

Results: The majority of patients (72%) were aged from 65 to 70 years. Patients, who taking warfarin, INR time (2-3) arranged from 78 to 82%. Patients with high risk of thromboembolic complications (more than 5 points)of CHA2DS2VASS scale was significantly more in patients, who were not taking warfarin (18%) compared with patients, who received warfarin ($p = 0.011$). The majority of patients had a high risk of bleeding (more than 3 balls) on a HAS-BLED scale.

Conclusions: The relationship between monitoring VKAs and their safety balance is proven. The exponential increase in studies evaluating health-related quality of life as an important outcome in anticoagulated patients has shown that monitoring these patients leads to more anticoagulation stability, lower incidence of bleeding, and less ischemic events. The structure of the leading risk factors was defined among patients with atrial fibrillation. The treatment of new oral anticoagulants allows us to assign them without special control laboratory control.

THE RELATIONSHIP BETWEEN OBESITY AND PLASMINOGEN ACTIVATOR INHIBITOR 1 TYPE PLASMA LEVELS IN PATIENTS WITH SEVERE TRAUMATIC BRAIN INJURY

Towenna C.A., 5th year student
Scientific adviser – Kmyta O.P.
Medical Institute of Sumy State University, Department of Neurosurgery and Neurology

Plasminogen activator inhibitor 1 type **(**PAI-1) is the principal inhibitor of fibrinolysis. The production of PAI-1 by adipose tissue could be an important contributor to the elevated PAI-1 plasma levels.

Our study was aimed to analyze the relationship between obesity and PAI-1 plasma levels in patients with severe traumatic brain injury (STBI).

214 subjects have been examined. They were grouped into two categories: 1st group contained 119 patients with STBI, 2d (control) – 95 almost healthy individuals. Patient in each group were subgrouped according to their body mass index (BMI) and waist-hip ratio (WHR). We checked their PAI-1 plasma levels on the 1, 3, 7 and 14 days after hospitalization.

During the 1st day study, higher PAI-1 levels were reported to have association with obesity and STBI (119.1±2.51, normal body weight (NBW) – 111.7±1.45 ng/ml, p=0.042). Moreover, in the control group higher PAI-1 level were recorded in obese subjects (52.3±0.86, NBW – 25.4±1.0 ng/ml, p=0.0001) Thus, the association between obesity and increased PAI-1 level was still obvious on the 3d day study, levels of PAI-1 didn't change much in patients with STBI. The analysis of PAI-1 levels in STBI patients on the 7th day showed that the association remained significant between obesity and elevated PAI-1 level trending to decrease (98.3±5.61, NBW – 70.1±3.86 ng/ml, p=0.005), but was almost 2 times higher than that in the control group. PAI-1 levels in the subjects with STBI decreased slowly, independently of the BMI and WHR. Analyzing PAI-1 level on the 14th day, it was recorded that in the patients with STBI and NBW the PAI-1 level (56.2±3.98 ng/ml) was 2 times higher (according to the values in the control group); the patients with obesity and overweight still had high values (87.9±8.0 ng/ml) – level of PAI-1 was 1.7 times higher than that in the control group (p=0.004).

According to the results of the study, we can make a conclusion as for the association between changes in the plasma PAI-1 levels and body weight: PAI-1 values were significantly higher in the patients and control with obesity than in the patients with NBW, thus we can suggest the influence of overweight and obesity upon STBI course.